

SARDAR PATEL UNIVERSITY
Programme: BSC (MICROBIOLOGY)
Semester: V
Syllabus with effect from: June 2013

Paper Code: US05CMIC05	Total Credit: 3
Title Of Paper: Microbial Diversity and Ecology	

Unit	Description in detail	Weighting (%)
1	Mycology : General characteristics of Fungi – Thallus & Mycelial modifications. Nutrition in fungi. Asexual & sexual reproduction in fungi. Economic importance of fungi.	
2	Virology : One step growth experiment. Single burst experiment. Doermann's premature lysis experiment. Characteristics of HIV, hepatitis & pox virus. Viroids & Prions.	
3	Bacterial Diversity. Rickettsia. Chlamydia. Sulphur metabolizing bacteria. Mycoplasma. Actinomycetes. Photosynthetic bacteria- Oxygenic & anoxygenic. Spirochetes. Archaeobacteria.	
4	Microbial ecology : Communities & ecosystems. Populations & interaction. Commensalism. Synergism. Mutualism. Competition. Amensalism. Predation. Parasitism.	

Basic Text & Reference Books:

- Fungi - B. R. Vashishta.
- Genetics of bacteria & their viruses - Willam Hays.
- Microbiology - Pelczar, Chan and Krieg, 5th Ed.
- Principles of Microbiology - R. M. Atlas.
- Introduction to Fungi - H.C.Dubey

